

REMARKS

This Amendment is submitted in response to the non-final Office Action mailed on April 28, 2009. No fee is due in connection with this Amendment. The Director is authorized to charge any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112857-455 on the account statement.

Claims 13-15, 19-20 and 25-27 are pending in this application. Claims 1-12 and 16-18 were previously canceled without prejudice or disclaimer, and Claims 21-24 were previously withdrawn from consideration. In the Office Action, Claims 13-15, 19-20 and 25-27 are rejected under 35 U.S.C. §103. In response, Claims 13 and 25-27 have been amended and Claims 28-29 have been newly added. The amendments do not add new matter. The new claims do not add new matter. At least in view of the amendments and/or for the reasons set forth below, Applicant respectfully submits that the rejections should be withdrawn.

Applicants note that Claims 25-27 have been amended solely for clarification purposes. These amendments do not add new matter. The amendments are supported in the Specification at, for example, Abstract; page 3, paragraph 30; paragraph 34, lines 1-6; page 5, paragraph 48, lines 18-25; paragraphs 49-50; page 6, paragraph 55, lines 1-15; paragraph 56, lines 1-5; Figs. 1 and 4.

In the Office Action, Claims 13-15, 19 and 27 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,976,725 to Gamo et al. ("*Gamo*") in view of U.S. Patent Publication No. 2002/0011335 A1 to Zhang et al. ("*Zhang*"). In response, Applicants have amended independent Claim 13. In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully submit that, even if combinable, the cited references fail to disclose or suggest each and every element of independent Claim 13 and Claims 14-15, 19 and 27 that depend therefrom.

Currently amended independent Claim 13 recites, in part, a fuel cell mount apparatus comprising: a fuel cell capable of power generation by use of a fuel and air, said fuel cell having a plurality of power generation sections; an electronic apparatus having said fuel cell mounted thereon and being operated by electric power outputted from said fuel cell, said electronic apparatus having a plurality of drive sections that require electric power; a common part used in common for said fuel cell and said electronic apparatus; and an electric power supply means for

supplying electric power to a predetermined drive section of said plurality of drive sections, wherein said electric power supply means supplies electric power to said predetermined drive section and said fuel cell supplies electric power to drive sections of said plurality of drive sections other than said predetermined drive section, and wherein said predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell. These amendments do not add new matter. The amendments are supported in the Specification at, for example, page 2, paragraph 12, lines 6-11; paragraphs 15-16; paragraph 17, lines 1-3; paragraphs 18-19; page 3, paragraph 20; paragraph 35, lines 1-4; page 5, paragraph 51, lines 1-18; page 6, paragraphs 53 and 56-57; pages 6-7, paragraph 58; page 7, paragraphs 60 and 63; page 8, paragraph 66; Figs. 1 and 4. In contrast, the cited references fail to disclose or suggest every element of the presently pending claims.

For example, the cited references fail to disclose or suggest a fuel cell mount apparatus wherein said electric power supply means supplies electric power to said predetermined drive section and said fuel cell supplies electric power to drive sections of said plurality of drive sections other than said predetermined drive section as recited, in part, by independent Claim 13. The Patent Office admits that *Gamo* fails to disclose an electric power supply means for supplying electric power to a predetermined drive section of the plurality of drive sections and instead relies on *Zhang* for the claimed element. See, Office Action, page 3, lines 15-22; page 4, lines 1-19. However, the portion of *Zhang* relied on by the Patent Office merely discloses a hybrid power system comprising a fuel cell 802 and a battery 804 connected in parallel across a single load 806. See, *Zhang*, page 6, paragraph 78; Fig. 14. As such, *Zhang* teaches using the battery 804 and fuel cell 802 in combination to provide power to the same section or load 806. See, *Zhang*, page 6, paragraph 78; Fig. 14.

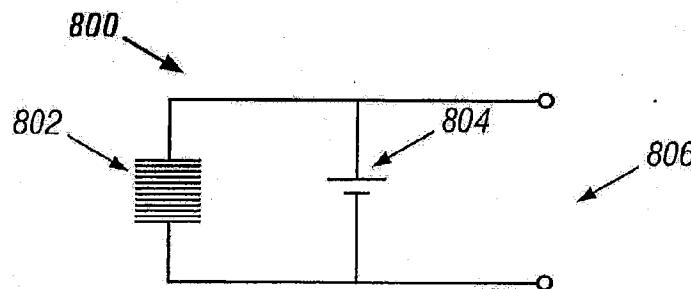


FIG. 14

In fact, *Zhang* expressly teaches that the battery is used only with the fuel cell to provide additional power to loads already being supplied by the fuel cell: “[w]hen coupled with a battery 804, the fuel cell 802 does not need to generate the maximum power output required for a short duration peak load.” See, *Zhang*, page 6, paragraph 78, lines 6-8. *Zhang* further emphasizes using the battery in addition to the fuel cell for supplying power to a single load in stating that “[t]he rechargeable batteries 804. . . can be used to boost the power output during the high power consumption periods.” See, *Zhang*, page 6, paragraph 78, lines 13-16. Nowhere does *Zhang* disclose using the battery to supply power to a section or load other than the predetermined section or load being supplied by the fuel cell.

The Patent Office asserts that the previous claims did not restrict whether the fuel cell also provides electric power to the predetermined drive section supplied by the electric power supply means. See, Office Action, page 10, lines 11-15. The Patent Office relies on the open-ended meaning of the term “comprising” to assert that the fuel cell can provide power to the same drive section as the electric power supply means. See, Office Action, page 10, lines 16-19. In response, Applicants have amended independent Claim 13 to clarify that the electric power supply means supplies electric power to a predetermined drive section and the fuel cell supplies electric power “to drive sections of said plurality of drive sections other than said predetermined drive section.” Applicants respectfully submit that the phrase “other than said predetermined drive section” clearly requires that the fuel cell supply power to a different drive section than the electric power supply means. As such, *Zhang* and, thus, the cited references fail to disclose or suggest that said electric power supply means supplies electric power to said predetermined drive section and said fuel cell supplies electric power to drive sections of said plurality of drive sections other than said predetermined drive section in accordance with the present claims.

Moreover, the cited references fail to disclose a fuel cell mount apparatus wherein said predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell as recited, in part, by independent Claim 13. As discussed previously, the Patent Office admits that *Gamo* fails to disclose an electric power supply means for supplying electric power to a predetermined drive section of the plurality of drive sections. See, Office Action, page 3, lines 15-22; page 4, lines 1-19. Therefore, *Gamo* also fails to disclose that the predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell.

Zhang also fails to disclose that a predetermined drive section supplied with power by an electric power supply means has a larger load variation than the drive sections supplied with power by the fuel cell. The Patent Office asserts that “[i]t would have been obvious to one of ordinary skill in the art. . . to couple a battery with the fuel cell and drive sections of *Gamo* because *Zhang* teaches it provides peak load requirements. Further, the coupled battery of *Zhang* would provide peak load requirements to a drive section requiring the load due to a large load variation.” See, Office Action, page 4, lines 17-22. However, as discussed previously, *Zhang* merely teaches coupling a battery with a fuel cell in parallel across the same load. See, *Zhang*, page 6, paragraph 78; Fig. 14. Nowhere does *Zhang* disclose or even suggest that the battery and fuel cell supply power to different loads or sections. Therefore, Applicants respectfully submit that *Zhang* cannot disclose a predetermined drive section supplied with power by its battery that has a larger load variation than the drive sections supplied with electric power by the fuel cell. Instead, *Zhang* discloses that the fuel cell 802 coupled with the battery 804 supply power to a same load or section 806.

The Patent Office asserts that *Zhang* teaches that a secondary battery is beneficial for a load variation and that the “comprising” language in the claim does not prevent the secondary battery from providing electric power to all of the drive sections. See, Office Action, page 11, lines 1-6. However, Applicants respectfully submit that, even if the Patent Office’s assertion that the secondary battery can supply power to all of the drive sections is correct, if this were the case, then *Zhang* would not teach using the battery to supply a predetermined drive section with power but rather using the battery to supply all of the drive sections with power. Furthermore, because *Zhang* teaches only using the battery in parallel with the fuel cell to supply power across a load, *Zhang* only discloses that the battery and fuel cell supply power to the same load. See, *Zhang*, page 6, paragraph 78; Fig. 14. Thus, *Zhang* fails to disclose that a battery supplies power to a predetermined section having a greater load variation than the drive sections supplied with power by the fuel cell.

Applicants also respectfully note that *Zhang* does not teach using a secondary battery for a load variation but rather for a large load. Applicants submit that one of ordinary skill in the art would understand a difference between a large load and a large load variation. For example, *Zhang* merely teaches using the battery in addition to the fuel cell across a single load 806 “to boost the output power during the high power consumption periods.” See, *Zhang*, page 6,

paragraph 78, lines 13-16. Nowhere does *Zhang* suggest using the fuel cell for one load or section and using the battery for a different, predetermined section having a larger load variation than the sections supplied with power by the fuel cell. As such, *Zhang* and, thus, the cited references fail to disclose or suggest a fuel cell mount apparatus wherein said predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell as required, in part, by the present claims.

Accordingly, Applicant respectfully requests that the rejection of Claims 13-15, 19 and 27 under 35 U.S.C. §103(a) to *Gamo* and *Zhang* be withdrawn.

In the Office Action, Claims 13-15, 19 and 25-27 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,421,585 B1 to Takamura ("*Takamura*") in view of *Gamo* and *Zhang*. In response, Applicants have amended independent Claim 13. In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully submit that, even if combinable, the cited references fail to disclose or suggest each and every element of independent Claim 13 and Claims 14-15, 19 and 25-27 that depend therefrom.

As discussed previously, *Gamo* and *Zhang* fail to disclose or suggest a fuel cell mount apparatus wherein: (1) said electric power supply means supplies electric power to said predetermined drive section and said fuel cell supplies electric power to drive sections of said plurality of drive sections other than said predetermined drive section; and (2) said predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell as required, in part, by independent Claim 13. The Patent Office admits that *Takamura* fails to disclose an electric power supply means for supplying electric power to a predetermined drive section. See, Office Action, page 6, lines 19-21. As such, *Takamura* also fails to disclose that the predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell. Therefore, even if combinable, *Takamura* fails to remedy the deficiencies of *Gamo* and *Zhang* with respect to the present claims.

Accordingly, Applicants respectfully request that the rejection of Claims 13-15, 19 and 25-27 under 35 U.S.C. §103(a) to *Takamura*, *Gamo* and *Zhang* be withdrawn.

In the Office Action, Claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Takamura* in view of *Gamo* and *Zhang* and further in view of U.S. Patent No. 6,522,096 B1 to Roth ("*Roth*"). Applicants respectfully submit that, even if combinable, the cited references are deficient with respect to Claim 20.

As discussed previously, *Takamura*, *Gamo* and *Zhang* fail to disclose or suggest a fuel cell mount apparatus wherein: (1) said electric power supply means supplies electric power to said predetermined drive section and said fuel cell supplies electric power to drive sections of said plurality of drive sections other than said predetermined drive section; and (2) said predetermined drive section has a larger load variation than the drive sections supplied with electric power by the fuel cell as required, in part, by independent Claim 13 from which Claim 20 depends. The Patent Office relies on *Roth* merely for the disclosure of a providing a plurality of drive sections and a plurality of power generation sections disposed respectively in proximity of the drive sections for supplying electric power respectively from the power generation section to the corresponding drive section. See, Office Action, page 8, lines 18-21; page 9, lines 1-21. However, nowhere does *Roth* disclose using an electric power supply means to supply power to a predetermined drive section having a larger load variation than those sections supplied with power by the fuel cell, nor does the Patent Office cite support for such claimed elements. Therefore, even if combinable, *Roth* fails to remedy the deficiencies of *Takamura*, *Gamo* and *Zhang* with respect to Claim 20.

Accordingly, Applicants respectfully request that the rejection of Claim 20 under 35 U.S.C. §103(a) to *Takamura*, *Gamo*, *Zhang* and *Roth* be withdrawn.

Applicant further notes that Claims 28-29 have been newly added. The new Claims are fully supported in the Specification at, for example, page 2, paragraph 12, lines 6-11; page 5, paragraph 48, lines 9-18; paragraph 51, lines 12-18; page 6, paragraph 54; Fig. 4. No new matter has been added thereby. Applicant respectfully submits that the subject matter as defined in the newly added claims is patentable over the cited art for at least substantially the same reasons as discussed above.

Specifically, the cited references fail to disclose a plurality of power generation units dispersed throughout the electronic apparatus. For example, the Patent Office admits that *Gamo* fails to disclose a plurality of power generation sections and instead relies on *Zhang* for the claimed element. See, Office Action, page 3, lines 10-14. However, the portion of *Zhang* relied

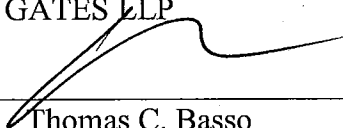
on by the Patent Office merely discloses stacking components of a membrane electrode assembly ("MEA") "in various combinations to provide fuel cells with more or fewer reaction zones and membranes." See, *Zhang*, page 3, paragraph 43, lines 9-11. As such, at best, *Zhang* disclose merely a plurality of power generation units stacked on top of each other. Nowhere does *Zhang* disclose dispersing a plurality of power generation units throughout an electronic apparatus, nor does the Patent Office cite support for such claimed element. As such, the cited references fail to disclose a fuel cell mount apparatus wherein a plurality of power generation units are dispersed throughout the electronic apparatus as required, in part, by Claims 28-29.

For the foregoing reasons, Applicant respectfully submits that the present application is in condition for allowance and earnestly solicits reconsideration of same.

Respectfully submitted,

K&L GATES LLP

BY


Thomas C. Basso

Reg. No. 46,541

Customer No. 29175

Date: July 28, 2009